

# Visual Radio Solution



**VJPro Console:**

**Watch your Radio now!**

## Studio



→ FM 

→ TV 

→ WEB 

## What does Visual Radio mean?

It means that your radio can be seen.  
It means that Radio programs and shows will be aired both on Radio and TV at the same time.  
It means being able to produce Radio programs with video, to deliver the signal to FM, TV and WEB.

**Now your Radio goes to TV and you can even watch it!**

## Who are the targets?

The targets are both new and existing Radio Broadcasters that wish to extend their media coverage from FM to TV, with minimum investment.

*TV is intended in its widest range:*  
SAT, DVB-T, DVB-C, WEB, IPTV, etc.  
Broadcast quality (interlaced).  
Any resolution: SD/HD/4K and more.

## **Scope of the Visual Radio Solution & Customer benefits**

Produce Radio and TV without bearing the costs and efforts required for traditional TV production.  
Setup a system that seamlessly delivers content for Radio and TV broadcasting.

**Add new media and became multiplatform**

**More Advertisement**

**Cross promotion**

**Run a TV station with the same technical staff and talent used in Radio**

**No need of TV expertise**

**One time minimum investment**

**Near zero cost for TV production.**

Radio can be seen on TV, at the same time?

Traditional Radio studios became a TV stage, just adding cameras and lights

**Any radio content and program triggers its own related video and graphic content such as:**

**video clip, title and author for songs or  
camera and lower third for live talk shows  
station logo and program ID  
social network**

Does the radio need to change its workflow or its equipment?

No, the radio keeps running as normally does, while Video/TV simply follows

**What is seen on TV is defined by the Radio Director who establishes the style of the channels.**

**Radio rules the TV.**

### What do I have to do every day for the TV?

Whenever a new audio is added to the radio archive/database then the related video or images must be simply added too.

**The system provides semi-automated tools to easily find and retrieve video and picture from internet (f.i.: using song author and title obtained from the archive), then the user has to confirm the content.**

### What happen in TV if there is no video?

While audio is always guaranteed by the radio playout, it might happen that the video is missing or even does not exist.

**Don't worry, this kind of exception are foreseen by the system and can be managed according to your needs. These behaviors can be customized according to guidelines and instructions defined by the station manager during system setup.**

**For instance, in case of missing video the system can be configured to automatically show alternative content on TV/video:**

- slide show of selected pictures can be automatically created for each single song.**
- cameras shot of the Radio studio/stage or panoramic views**
- Animations and graphics**
- feeds from external sources**

### What else I have to do for TV content?

One-time definition of the channel branding guidelines which are the rules to be followed in the design and creation of any graphics that will be shown on TV (colors, font, style, etc.).

The channel branding defines the look of the channel and distinguish the corporate/station image.

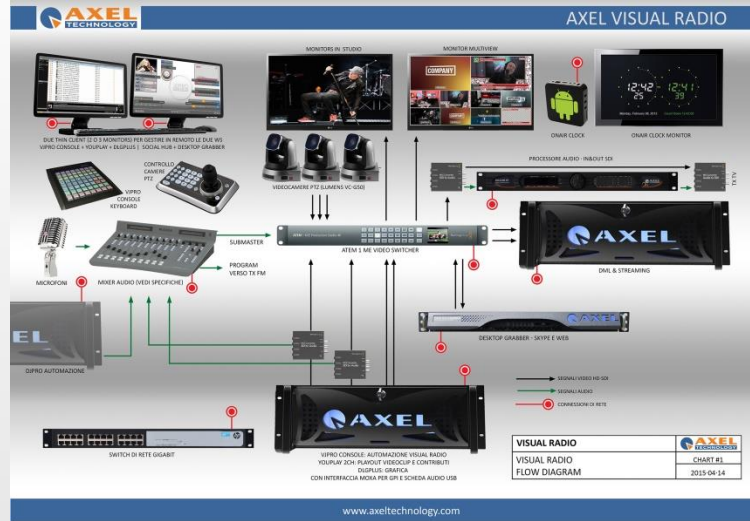
**It is crucial to match these rules in any superimposed graphic object:**

Station logo  
Programs logo  
Banners  
Pop-up

Tickers or crawl  
Animations  
Clocks  
Jingles

### How is the entire workflow and synchronization possible?

VJPRO CONSOLE is the engine of the solution that makes VISUAL RADIO possible and keep it running on air 24/7, with or without operators.



## Can I keep the products in use in my Radio?

Yes, the VJPRO CONSOLE can be integrated with the majority of the products available on the market, new and legacy.

Radio Automation software  
Mixing consoles  
Video switcher  
Cameras

**Axel Technology is able to offer complete VISUAL RADIO solutions and also integrate products already available at customer premises.**

Some analysis might be required to check brand, model and features of the products provided by the customer, in order to integrate the system workflow.

**Customization are also available to match special requirements.**

### VISUAL RADIO SOLUTION MAIN FEATURES

RADIO & TV on air simultaneously with highly accurate and automated integration/workflow.

Production of Radio and TV channel with the same staff.  
No need to add skilled operators and video engineers.

Impressive graphics: Multi-layered CG with animations, tickers, crawls, weather and automatic titling

Social Network integration: keep in touch with audience and display content from Facebook, WhatsApp, SMS, RSSs, Twitter, WeChat, RSS feeds, Watch Folder, etc.

**Easy to use:** the system can operate automatically or manually and provide a smart interface that allows the presenter to easily control audio, video, logo and graphics, cameras, etc.

**Cameras Intelligent switching:** the switch can be manual or automatic according to many criteria and combinations of status (f.ex.: controlled from the fader status or microphones level on the radio mixer, timer, etc.).

**Auxiliary sources form WEB and Desktop:** broadcast external sources and feeds, such as incoming video calls from Skype, video from YouTube, content from windows desktop (Browser, PDF, XLS, DOC, images, streams, etc.).



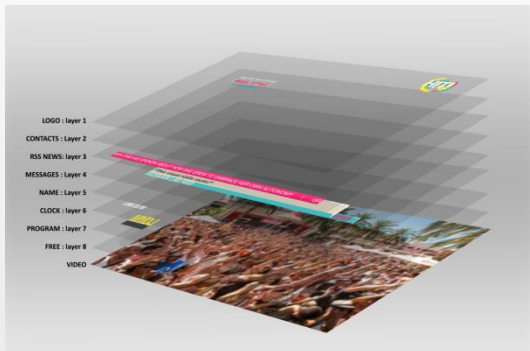
## VJPro console



The Visual Radio Solution is the integration between Radio and TV that allows Radio to be seen on TV.

The radio keeps running as normally does, and the integration takes care to synch the TV and Radio stream.

The engine of this integration is the  
**VJPro Console**



The engine of this integration is the VJPRO CONSOLE.

The integration is seamlessly performed by VJPRO that manages the workflow: is connected to all the equipment involved, receives the triggers and accordingly controls the video players, cameras switching and graphics.

VJPRO is informed about any audio played by radio automation (song, jingle, ads, news, recorder program, etc.) or live programs (talk shows, news, feeds, etc.), or action on the audio mixer (fader, GPI, etc.) that trigger the related video content and graphics.

VJPRO perfectly adapts to different operative conditions: automatic or manual, with or without operator, with scheduled program and live shows.

The behavior of the system in any condition can be defined in the settings panel by the Station manager or system administrator, who delineate the style of the channels.



## VJPro console – Main principles

The radio playlist is also the driver of the TV stream and content.

TV program simply follows the Radio program.

Any audio content will have its related video content as defined by the Station Manager.

If there is no video then the VJPRO can air alternative sources/content like cameras, slideshow of images, feeds, graphics, etc.

## VJPro console – Main Feature

### **Radio Automation integration:**

Native integration with DJPRO Radio automation software

Custom modules to integrate third party radio automations (RCS, Netia, ...)

### **Radio Console integration:**

Native integration with OXYGEN 3000 digital radio console

Custom modules to integrate third party mixing console (Studer, Axia, Lawo, DHD, Wheatstone, ...)

GPIO management

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### **Video Playout and Capture:**

2 channels playout with video mixing/cross fade/effects.

Perfect Audio/Video synch.

1 channel recording.

### **Graphics engine:**

Multi-layer CG for graphic generation with Fill and Key.

Automatic titling (song author and title)

Animations, logo, Ticker, Clock, etc.

RSS feeds, Weather information, News, etc.

Social Network content integration (using “Social Hub” software from Axel Technology)

Free CG composer software for graphic layout creation

## VJPro console – Main Feature

### **User Interface:**

Smart GUI for manual control of graphics, layouts, video switcher, cameras, recorder, studio switch.  
Hardware Instant keyboard with 64 hotkeys

### **Video Switcher control:**

Native integration with Atem, VMIX, Tricaster, etc.  
Connection: SDI/NDI/Stream (according to video switcher features)  
TCP/IP and serial connection

### **Cameras integration:**

Camera control (Sony/Visca/Panasonic protocols)  
Intelligent switch for automatic camera switch (multiple configurations and rules)

## VJPro console – Technical Info

### Automation file exchange

XML  
TXT/ASCII  
SQL  
Windows forms label

### Automation Commands

GPI  
TCP/IP

### Audio signals:

Analog balanced/unbalanced  
Digital AES/EBU  
AoIP (Dante, AS67, Livewire)

### Video signals I/O:

SDI  
NDI  
IP stream

### Video Resolution:

SD/HD/4K  
others

### Video File Format:

Supports almost any format available on the market

### Graphic format

PNG/TGA/BMP/TIFF/JPG/GIF/FLASH

*VJPRO is sold as “turnkey unit” called VJPRO COMPACT.*

### VJPRO COMPACT includes:

- PC (CPU i7) rackmount 4RU 19”
- Instant keyboard 64 Hotkeys
- Blackmagic broadcast video board with 4/8 SDI I/O, SD/HD/4K
- Internal storage 6+6TB in mirror configuration

## VJPro console – Technical Info

### Radio and TV (audio/video) contents:

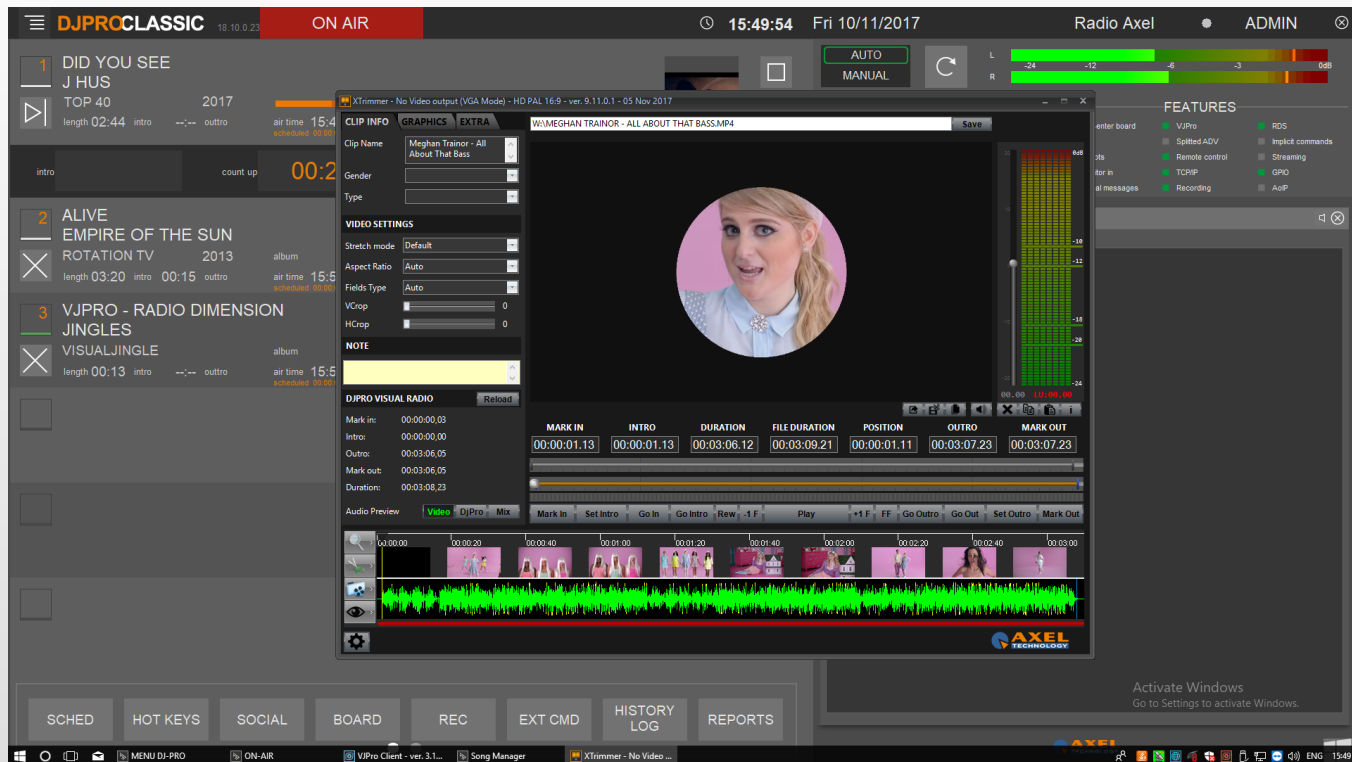
Radio	TV	Graphics
Song Jingles Speech and live talk shows Advertising News Recorded programs Feeds and sources	Video clip. Pictures slide show. Cameras. Feeds.	Station logo. Program logo. Song author and title. Lower thirds. Ticker. Animations. Clock.

### System componend and equipment

RADIO equipment	Integration	TV equipment
Radio Automation and playout Mixing Console Microphones Player CD, SSD, MP3 Tuner Speakers	VJPRO CONSOLE	Video Mixer (HS/SW) Cameras Studio Lights Monitors Studio decorations







The screenshot displays the DJPROCLASSIC software interface, which is used for live broadcasting. The top bar shows the station name "DJPROCLASSIC", the time "15:49:54", the date "Fri 10/11/2017", and the station name "Radio Axel". The interface is divided into several sections:

- Left Panel:** Contains a list of songs and their durations. The first song is "DID YOU SEE J HUS" by "TOP 40" (length 02:44). The second song is "ALIVE EMPIRE OF THE SUN" by "ROTATION TV" (length 03:20). The third song is "VJPRO - RADIO DIMENSION JINGLES" by "VISUAL JINGLE" (length 00:13).
- Center Panel:** Displays the video output. It shows a circular video feed of a woman with blonde hair. Below the video feed is a timeline with markers for "MARK IN", "INTRO", "DURATION", "FILE DURATION", "POSITION", "OUTRO", and "MARK OUT". The timeline shows the current position of the video and the duration of the intro and outro.
- Right Panel:** Contains a "FEATURES" section with a list of features and their status. The features listed are: VJPro, RDS, Spliced ADV, Remote control, Streaming, TCP/IP, GPO, and Recording. The status of each feature is indicated by a green checkmark.
- Bottom Panel:** Contains a "SCHED" section with buttons for "HOT KEYS", "SOCIAL", "BOARD", "REC", "EXT CMD", "HISTORY LOG", and "REPORTS".

The interface also includes a "VIDEO SETTINGS" section on the left, which allows users to adjust video parameters such as "Stretch mode", "Aspect Ratio", "Fields Type", "VCrop", and "HCrop". There is also a "NOTE" section and a "DIPRO VISUAL RADIO" section with a "Reload" button.